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Daniel Marie Attorney for Applicant

PATENT Docket No. STL920000102US1

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Alan R. Smith, et al.	)	
Serial No.:	09/778,236	)	
Filed:	February 6, 2001	)	
For:	METHOD, COMPUTER PROGRAM PRODUCT, AND	)	
	SYSTEM FOR CREATING FORM INDEPENDENT	)	Group Art
	APPLICATIONS OPERATIVE ON IMS RESOURCES	)	Unit: 2127
Examiner:	Tang, Kenneth	)	
		)	

# **APPEAL BRIEF**

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## Dear Examiner:

The USPTO received Appellant's timely Notice of Appeal on March 17, 2005, which was filed in response to the Final Office Action mailed December 15, 2004, and the Advisory Action mailed March 1, 2005. Appellant appeals the rejection of and objections to pending claims 1-48.

This Appeal Brief is being filed under the provisions of 37 C.F.R. § 41.37. The filing fee set forth in 37 C.F.R. § 41.20(b)(2) of \$500.00 is submitted herewith. The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or to credit any overpayment, to Deposit Account No. <u>09-0460</u>.

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#### 1. REAL PARTY IN INTEREST

The real party in interest is the assignee, International Business Machines Corporation, Armonk, New York.

## 2. RELATED APPEALS AND INTERFERENCES

There are no related appeals, interferences, or judicial proceedings.

## 3. STATUS OF CLAIMS

The Final Office Action rejected Claims 1-47 and objected to Claims 16, 17-18, 36-37, and 46-47. Claims 1-47 stand rejected under 35 U.S.C. §112, 2<sup>nd</sup> paragraph for indefiniteness. Claims 1-16, 19-35, 38-45, and 48 stand rejected under 35 U.S.C. §103(a) as obvious in view of subject matter asserted to be Applicant's Admitted Prior Art (AAPA) in view of U.S. Patent No. 5,758,333 to Bauer et al. (hereinafter "Bauer"). Claim 16 was objected to for informalities. Claims 17-18, 36-37, and 46-47 were objected to, but found allowable if amendments were made to overcome the rejections to the respective independent and intermediate claims.

According to the Advisory Action mailed March 1, 2005, the claims remain rejected and objected to as set forth in the final rejection. The Advisory Action asserts that the amendments submitted in the request for reconsideration mailed January 21, 2005 will not be entered because the amendments raise new issues that would require further consideration and/or search and do not place the application in better condition for appeal. Appellant appeals the rejection of Claims 1-47 and the objection to claims 16, 17-18, and 36-37.

# 4. STATUS OF AMENDMENTS

The Advisory Action mailed March 1, 2005 indicates that the amendments of the request for reconsideration mailed January 21, 2005 will not be entered for purposes of appeal.

## 5. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed subject matter deals with performing of application programming tasks without previously provided information regarding a Program Specification Block (PSB) or a

Program Control Block (PCB). See Spec. page 1, lines 11-15. Specifically, the claimed invention operates within a Information Management System (IMS) environment available from International Business Machines (IBM). See Spec. page 1, lines 7-9.

The problem is that utility programs, designed to operate in various IMS environments, are unaware of site-specific IMS data structures, also known as constructs. See Spec. page 2, lines 19-21. Without information about specific constructs, the utility programs fail to operate with the data properly. See Spec. page 2, lines 3-5. The conventional solution is to generate constructs tailored to the utility program using a tool such as PSBGEN. See Spec. page 5, lines 6-11. Alternatively, IMS owners may alter the constructs to obtain compatibility with the utility programs. See Spec. page 3, lines 9-10. Making such changes can be costly, time consuming, error prone, and slow as IMS administrators may have to be consulted to alter the constructs. See Spec. page 3, lines 10-20. Administrators may make formatting changes to Program Communication Block (PCB) and Program Specification Block (PSB) constructs for compatibility with the utility programs. See Spec. page 4, lines 3-11.

Embodiments of the present invention include methods, a system, and article of manufacture for performing an application program operation on at least one Information Management System resource.<sup>1</sup> See e.g. Claims 1, 19, 20, and 38. The method of Claim 1 includes locating an actual Program Communication Block (PCB) associated with an IMS resource without knowledge of an IMS construct form and utilizing the actual PCB to perform form independent program operations on the IMS resource. See Figs. 9-11. The present invention dynamically locates actual PCBs to use to perform the program operations without altering PCBs or generating new PCBs. See specification page 18, lines 1-3, page 6, lines 7-10.

Regarding Claim 14, flow diagrams 650, 750, and 805 illustrate how actual PCBs may be dynamically located by referencing a parameter list 330. See Figs. 9-11. Figures 4-6 illustrate data structures that may be referenced to find the actual PCBs. See specification page 11, lines 12-13. The present invention references an existing (also referred to as actual) PCB to obtain

<sup>&</sup>lt;sup>1</sup> Although Appellant has summarized embodiments of the present invention, the present invention is defined by the claims themselves. Appellant's summary is not intended to limit the scope of the claims or individual claim elements in complying with the appeal brief requirements under 37 C.F.R. § 41.37(c)(v).

information such as addresses and database identifiers needed for the application program to interact with various parts of the IMS environment. See specification page 15, lines 25-17, page 16, lines 9-11.

Figures 10-11 illustrate how the actual PCB is used depending on certain characteristics of the actual PCB, such as whether the PCB is an I/O PCB or a database PCB. See specification page 15, lines 2-5. Information such as database names may be provided to facilitate dynamic determination and use of the PCBs. See specification page 16, lines 9-11.

Claims 19, 20, and 38 include substantially the same subject matter as that described above in relation to Figure 1. Regarding the method of Claim 19, regarding ensuring existence of IMS constructs, figures 10-11 describe steps for determining the existence of PCBs or PSBs. See specification page 15, lines 2-5.

The system of claim 20 includes a computer, computer program first instructions and computer program second instructions. The computer program first instructions implement locating an actual Program Communication Block (PCB). The computer program second instructions implement utilizing the actual PCB to perform form independent program operations on the IMS resource. Regarding Claim 38, these computer program instructions may be embodied within an article of manufacture.

## 6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- I. Whether the Examiner properly rejected Claims 1-47 under 35 U.S.C. §112, 2<sup>nd</sup> paragraph for indefiniteness.
- II. Whether the Examiner failed to establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a) for Claims 1-16, 19-35, 38-45, and 48 where the cited references either do not qualify as prior art and/or do not teach or suggest every element of Claims 1-16, 19-35, 38-45, and 48 either alone or in combination.

#### 7. ARGUMENT

I. The Examiner failed to properly reject Claims 1-47 under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph for indefiniteness because the term "actual PCB" is not recited in connection with a "PCB" such that confusion can arise.

# A. Independent Claim 1

Applicant respectfully submits that independent Claim 1 is sufficiently definite with respect to the term "actual PCB." Claim 1 states:

- A method for performing on a computer system one or more form independent application program operations on at least one Information Management System (IMS) resource comprising:
- (a) locating an actual Program Communication Block (PCB) associated with said at least one IMS resource exclusive of predetermined knowledge pertaining to an IMS construct form, and
- (b) utilizing said **actual PCB** to perform said one or more form independent application program operations on said at least one IMS resource.

(emphasis added).

# B. The Rejection under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph

The Advisory Action mailed March 1, 2005 maintains the final rejection under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph as set forth in the Final Office Action mailed December 15, 2004. The Advisory Action states that amendments submitted in the request for reconsideration, mailed January 21, 2005, to clarify and resolve any "alleged" confusion would not be entered for purposes of the appeal. The amendments would have simply removed references to the term "actual" and replaced these references with appropriate articles such as "a" and "the." The rationale given for not entering the amendments was that amendments raise new issues, do not reduce issues for appeal, and alter the scope of the claims. The Final Office Action states:

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims....**Applicant admits** that the use of the term "PCB" may be confusing and indefinite once subject matter of the independent claims, such as claim 1 is considered together with Claims 14 and 17. It is noted that the features upon which applicant relies (i.e., "an actual PCB"

differs from a "candidate PCB" in that a "candidate PCB" may comprise a pointer to an actual PCB") are not recited in the rejected claims(s). Final Office Action, 12/15/2004, p. 11 (emphasis added).

# C. Withdrawal of the Rejection under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph

Applicant respectfully disagrees with the Office Action's assertions. Claim 1 and similar independent Claims 20 and 38 include only references to "an actual PCB." Dependent claims such as Claims 14 and 17 refer to a "candidate PCB." The standard for definiteness is "whether the claim meets the threshold requirements of clarity and precision, not whether more suitable language or modes of expression are available." See MPEP §2173.02. The Examiner "...should allow claims which define the patentable subject matter with a reasonable degree of particularity and distinctness. Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire." See MPEP §2173.02.

The first office action asserts that "actual PCB" is indefinite because a difference between a "PCB" and an "actual PCB" is not recited in Claim 1. Appellant fails to see the relevance of identifying in Claim 1 a difference between a "PCB" and an "actual PCB." "PCB" without the modifier "actual" is not recited in Claim 1. Therefore, why must a distinction be made between them? If "actual PCB" AND "PCB" are not recited together in Claim 1, there can be no confusion by those of skill in the art. Just because the modifier may not suit the Examiner's preferences, that does not justify this rejection, as noted above. See MPEP §2173.02. The purpose for the modifier "actual" as a distinguisher is clear when Claim 1 is read in combination with Claims 14 or 17.

Because Claim 1 includes no references to "PCB" without the modifying adjective "actual," Appellant respectfully asserts that the phrase "actual PCB" is sufficiently definite such that "…one skilled in the art would have no difficulty interpreting the scope of the claims and avoiding infringement, the very purpose of the second paragraph of §112. See <u>United Carbide</u> Co. v. Binney Co., 317 U.S. 228 (1942).

Furthermore, the term "actual PCB" indicates that the PCB is a real PCB that exists. This modifier for the term "PCB" also distinguishes one actual PCB from a first or second candidate

PCB. See response to first office action mailed September 7, 2004, page 13. The supposed admission quoted above, relied upon by the Examiner, is not an admission that the term "actual PCB" may be confusing, but rather an assertion that "PCB" absent the modifier "actual" would be confusingly indefinite when Claims 1 and 14.

Therefore, Appellant respectfully asserts that use of the term "actual PCB" is sufficiently definite for those of skill in the art. Furthermore, the clarification in the specification between candidate PCBs and actual PCBs sufficiently clarifies the meaning of the term "actual PCB" for those of skill in art. See specification page 11, lines 8-9 and 19-20, Hybritech Inc. v. Monoclonal Antibodies, 231 U.S.P.Q. 81 (Fed. Cir. 1986). It should be noted that those of skill in the art are computer professionals familiar with Program Communication Blocks (PCBs) and IMS.

Finally, Appellant respectfully disagrees that the proposed amendments filed in the request for reconsideration mailed January 21, 2005, raise new issues, do not reduce issues for appeal, and alter the scope of the claims. First, if the amendments had been entered, this issue would not be an issue in this Appeal Brief. Second, if the Examiner asserted indefiniteness between the terms "PCB" and "actual PCB," the Examiner must then have recognized that the scope of this claim includes a "PCB" and an "actual PCB." Therefore, Appellant contends that amending to recite "PCB" (as in the proposed amendment) can not change the scope of the claims so as to raise new issues and require further consideration and/or search? Appellant asserts that by raising the issue of indefiniteness as the Examiner has, the claim scope without the modifier was recognized by the Examiner during the initial examination. Consequently, Appellant asserts that the Examiner improperly failed to enter the proposed amendments in the request for reconsideration.

Given that the term "actual PCB" is sufficiently definite, Appellant requests that the rejection of Claim 1-47 under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph for indefiniteness be withdrawn.

II. The Examiner failed to establish a prima facie case of obviousness under 35

U.S.C. § 103(a) for Claims 1-16, 19-35, 38-45, and 48 because the cited references either do

not qualify as prior art and/or do not teach or suggest every element of Claims 1-16, 19-35,

38-45, and 48 either alone or in combination.

# Applicant's Admitted Prior Art (AAPA)

## A. AAPA

Appellant respectfully submits that AAPA does not qualify as admitted prior art. In the Final Office Action mailed December 15, 2004 the Examiner asserts:

The Applicant Admitted Prior Art also includes sections of the specification that state what is well known, existing, or conventional. On page 6, lines 5-7, it is stated how existing IMS constructs are utilized. Final Office Action, 12/15/05, page 11. (emphasis in original).

Appellant asserts that the Examiner is using this reference and all other references to subject matter in the Appellant's own disclosure out of context and is not admitted prior art. Therefore, the subject matter relied upon in the specification by the Examiner in rejecting Claims 1-16, 19-35, 38-45, and 48 is not prior art. Furthermore, the remaining art relied upon by the Examiner also fails to teach, disclose or suggest each element of the independent Claims 1, 19, 20 and 38.

## B. Admitted Prior Art Standard

The standard for admitted prior art is set forth in MPEP §2129. Use of admissions as prior art is controlled largely by case law. MPEP §2129 provides specific guidance for the Examiner on this matter. See MPEP §2129, Rev. 2 May 2004. In particular, if the specification "identifies work done by another as "prior art," the subject matter so identified is treated as admitted prior art. *In re Nomiya*, 509 F.2d 566,571, 184 USPQ 607, 611 (CCPA 1975)." See MPEP §2129(II). Therefore, the specification must provide sufficient identification of the work as prior art work. Appellant respectfully submits that the alleged AAPA relied upon does not identify the subject matter as prior art. Evidence of this assertion is provided by the context and placement of the subject matter in the specification.

# C. AAPA Subject Matter

In the initial Office Action mailed June 4, 2004, the Examiner cites page 6, lines 4-10 in the specification as AAPA in support of two elements of Claim 1, namely "(a) at least one IMS resource exclusive of predetermined knowledge pertaining to an IMS construct form...and (b) locating/utilizing and performing said one or more application program operations on said at least one IMS resource." See Office Action mailed June 4, 2004, page 3.

The Appellant's specification on page 6 lines 4-10 recites:

The present invention thereby eliminates constraints placed on the form of IMS constructs by an application program executing in an IMS environment. Existing IMS constructs are utilized without predetermined knowledge of their number, type, language, order or other characteristics. The present invention enables an application program to use information from PSBs and PCBs in their existing form, rather than requiring these IMS constructs to conform with the idiosyncrasies of an application program's implementation.

See Specification, page 6 lines 4-10.

There are multiple contextual indicators that demonstrate that the Applicant considers none of the subject matter in this paragraph to be prior art. The subject matter is work done by the Applicant and not another.

First, this paragraph is located in the summary section of the patent specification entitled "SUMMARY OF THE INVENTION." "The purpose of the brief summary of invention is to apprise the public...of the nature of the invention, the summary should be directed to the specific invention being claimed." See MPEP §608.01(d). Consistent with this purpose the alleged AAPA describes benefits of the present invention as the invention is recited in the claims, described in the preceding paragraphs. Each sentence in the alleged AAPA is directed toward an advantage of the present invention.

Second, the first and third sentences reference the "present invention." This is a contextual indicator that the subject matter is concerned with the Applicant's invention and NOT with subject matter is that prior art, conventional, or known.

Third, the alleged AAPA refers to **existing** IMS constructs and PSBs and PCBs in their **existing** form. In the Final Office Action, mailed December 15, 2004, the Examiner asserts that these references sufficiently identify the work as well known, existing, or conventional such that the subject matter qualifies as an admission of prior art. See quote above in section II. A.

Appellant completely disagrees. Instead, these references highlight one advantage of the present invention, the fact that the present invention does not require modification of the **previously defined** IMS constructs such as PSBs and PCBs present in an IMS environment using the present invention. This advantage is further explained above in the discussion relating to the §112 rejection.

The use of the term "existing" was used to distinguish previously defined IMS constructs in an IMS environment from those that have been modified, altered, or newly created to support an IMS utility program. The term "existing" in these sentences serves as an adjective for the terms "IMS construct" and PSB and PCB "forms," not an adjective for the technology of the present invention. The technology of the present invention is defined in the claims and operates on IMS constructs but is not the IMS constructs themselves. See Claim 1.

In fact, the term "existing" is simply an alternative form or synonym for the term "actual" that is used in the claims. See Claim 1. Appellant submits that the definition of the term "existing," as indicated from the context and use of the term in the alleged AAPA, is "1 a: to have real being whether material or spiritual." See Merriam-Webster dictionary for the term "existing", www.m-w.com.

Appellant submits that selectively extracting the term "existing" out of context, without more context indicators in favor of the Examiner's interpretation, does not justify the unreasonable leap made by the Examiner in characterizing the alleged AAPA section as AAPA. Furthermore, the context indicators surrounding the alleged AAPA clearly set forth that the present invention is being described and not the prior art. Therefore, Appellant requests that the alleged AAPA be found to not qualify as Admitted Prior Art. If an amendment replacing the term "existing" with a consistent alternative phrase such as "previously defined" would resolve that the alleged AAPA is not Admitted Prior Art, Appellant would do so, although Appellant does not believe such an amendment is necessary.

# Other alleged AAPA

In the Final Office Action, the Examiner relied upon other portions of the specification as alleged AAPA in rejecting Claims 2, 4-7, 11, and 12, including page 1, lines 19-21, page 2, lines

14-16, page 4, lines 3-11, page 4, lines 5-8, and page 2, first paragraph. Each of these references is to other portions of the background section. However, none of these references teach, describe or disclose the elements of independent Claims 1, 19, 20, and 38. Specifically, representative Claim 1 recites:

- (a) locating an actual Program Communication Block (PCB) associated with said at least one IMS resource exclusive of predetermined knowledge pertaining to an IMS construct form, and
- (b) utilizing said actual PCB to perform said one or more form independent application program operations on said at least one IMS resource.

Of course, the subject matter of the independent claims is described in the "SUMMARY OF THE INVENTION" section. However, that subject matter is not Admitted Prior Art, as described above. Consequently, there is no alleged AAPA that qualifies for use in a rejection of Claim 1. Furthermore, Claims 2, 4-7, 11, and 12 depend directly or indirectly from Claim 1. Therefore, these claims are also allowable.

Therefore, for reasons explained above, Appellant submits that the alleged AAPA does not qualify as Admitted Prior Art with regard to independent Claims 1, 19, 20, and 38 because the subject matter relied upon does not "identif[y] work done by another as 'prior art'." See MPEP §2129(II). Certain alleged AAPA may qualify as it relates to dependent claims, however these claims include the novel and patentable features of the independent claims upon which they rely.

## INDEPENDENT CLAIMS 1, 19, 20, and 38

## A. Independent Claims 1, 19, 20, and 38

Appellant respectfully submits that independent Claim 1 is representative of the patentable subject matter of Claims 19, 20, and 38. Appellant further submits that Claim 1 is non-obvious in view of AAPA and Bauer. Claim 1 states:

A method for performing on a computer system one or more form independent application program operations on at least one Information Management System (IMS) resource comprising:

- (a) locating an actual Program Communication Block (PCB) associated with said at least one IMS resource exclusive of predetermined knowledge pertaining to an IMS construct form, and
- (b) utilizing said actual PCB to perform said one or more form independent application program operations on said at least one IMS resource.

# B. The Rejection under 35 U.S.C. § 103(a)

The Advisory Action mailed March 1, 2005 maintains the final rejection under 35 U.S.C. § 103(a) as set forth in the Final Office Action mailed December 15, 2004. The Advisory Action states no further reasoning in support of the final rejection. The Final Office Action copies language from the previous Office Action mailed June 4, 2004 and relies on AAPA page 6, lines 4-10 in the specification to reject Claim 1. The Office Action states:

(a) at least one IMS resource exclusive of predetermined knowledge pertaining to an IMS construct form...and (b) **locating/utilizing** and performing said one or more application program operations on said at least one IMS resource. See Office Action, 6/4/2004, p. 3 (emphasis added).

# C. Withdrawal of the Rejection under 35 U.S.C. § 103(a)

Appellant respectfully disagrees with the Office Action's reliance on the AAPA in support of an obviousness rejection for Claim 1. As described above, AAPA fails to qualify as Admitted Prior Art because the alleged AAPA does not "identif[y] work done by another as 'prior art'." See MPEP §2129(II). Instead, page 6 lines 4-10 relate the benefits and advantages of the present invention which eliminate the need to alter or create new IMS constructs. Rather, the present invention allows the use of previously defined, or existing IMS constructs.

Appellant asserts that the Examiner used improper hindsight reconstruction analysis to examine Claim 1.

"[I]t is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. . . . This court has previously stated that '[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In re Fritch, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992).

The citation above is indicative of the Examiner's reading and interpretation of the claim language of Claim 1. See Office Action, 6/4/2004, p. 3. Appellant submits that the Examiner

has failed to properly read and interpret Claim 1. The Examiner merged the steps of locating an actual PCB and utilizing said actual PCB together as though the Appellant intended for these steps to be interchangeable. Appellant submits that such a reading is improper. Instead, each element (locating and utilizing) should be examined on its own merits. Doing so based on the valid art of record, leaves only Bauer for support of the rejection under 35 U.S.C. §103(a) because there is no Admitted Prior Art.

In the Final Office Action, mailed December 15, 2004, the Examiner asserts that a 35 U.S.C. §103(a) can not be properly argued against individually. See page 12. In response, Appellant submits that both alleged AAPA and Bauer have been argued against together. First, Appellant establishes the invalidity of the alleged AAPA. Then, the Appellant indicates that Bauer fails to teach the claim elements for which the alleged AAPA was relied upon.

Under 35 U.S.C. §103 the Examiner has the initial burden of presenting a *prima facie* case of obviousness. In re Rijckaert, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, the combination of the prior art references must teach or suggest all the claim limitations. MPEP § 2142. In addition, "it is insufficient that the prior art disclosed the components of the patented device, either separately or used in other combinations; there must be some teaching, suggestion, or incentive to make the combination made by the inventor." *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 934 (Fed. Cir. 1990).

# Bauer fails to teach all elements

Appellant submits that Bauer fails to suggest, teach, or disclose "locating an actual PCB" or "utilizing said actual PCB to perform one or more form independent application program operations" as recited in the claims of the present invention. See Claim 1. In contrast, Bauer teaches a system that inserts an application procedure layer "VIEW" between the application layer and the user module layer. See Bauer Col. 5, Lines 8-21. Previously, users built their own data modules for addressing and accessing data. See Bauer Col 1, lines 25-30. Bauer allows the application to be independent of the logical data structures. See Bauer Col. 5, Lines 8-21.

The claimed invention relates specifically to locating of PCBs in relation to IMS and IMS resources. "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

MPEP §2143.03. Each of the claim terms are to be given their reasonable meaning. The terms "IMS" and "PCB" were purposefully selected by the Appellant. Appellant finds no reference to "PCB" or "IMS" in Bauer. IMS is a well know hierarchical database management product available from IBM. Those of skill in the art readily recognize that the claimed invention relates specifically to IMS. There is no teaching or suggestion in Bauer regarding locating of a PCB for an IMS resource.

As explained in the specification, the ability to selectively locate and/or access multiple sets of PCBs saves considerable costs in terms of time and development work. See Specification Page 6, lines 15-19. The present invention does not require any information about the IMS construct forms.

The Examiner asserts that Bauer teaches "...said actual PCB to perform said one or more form independent application program operations on said at least one IMS resource." See June 4<sup>th</sup> 2004, Office Action page 3-4. Appellant respectfully submits that just because Bauer teaches referencing of data blocks through indirection, pointers (See Bauer Col. 7, Lines 10-20), this does not rise to the level of teaching "utilizing said actual PCB to perform said one or more form independent application program operations." Again, Appellant finds no reference to PCBs, nor to utilization of PCBs in Bauer.

PCBs are proprietary constructs that are closely related to both the IMS application and the IMS databases the IMS application will access. See PCB definition in Exhibit A of Appendix. PCBs enable an IMS application to interact with an IMS database. The claimed invention provides interoperability between two different IMS applications and a single IMS database without requiring any information about existing PCBs.

The claimed invention differs from Bauer because Bauer does not provide any teaching or suggestion for "locating an actual PCB..." Bauer teaches locating of data blocks using pointers however data blocks are very different from a PCB. Data blocks comprise a data structure that holds data. See Bauer, Col. 7, lines 10-20. As discussed above, a PCB is a program communication block. A PCB comprises control information that effectuates the communication of data from an IMS database to an associated IMS application, not the actual data that is transferred. See PCB definition in Exhibit A of Appendix. The PCB, when used, comprises actual object code used by IMS to communicate the data, not the data itself.

# Combination of AAPA and Bauer fail to teach or suggest all claim elements

Neither the AAPA nor Bauer teach or suggest combining concepts found in each or the desirability of such a combination. As "[t]he teaching or suggestion to make the claimed combination ... must be found in the prior art, not in applicant's disclosure," MPEP 2143, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991), Appellant submits that AAPA and Bauer fail in combination or alone to provide the requisite motivation to combine teachings of each to make a *prima facie* case of obviousness. This is particularly the case where AAPA does not qualify as prior art.

## DEPENDENT CLAIMS 2-16, 21-35, 39-45, and 48

Given that claims 2-16, 21-35, 39-45, and 48 depend from one of independent claims 1, 19, 20, or 38, which are believed to be patentable as described above, Appellant respectfully submits that the rejection of claims 2-16, 21-35, 39-45, and 48 under 35 U.S.C. § 103(a) is moot. Accordingly, Appellant requests that the rejection of dependent claims 2-16, 21-35, 39-45, and 48 under 35 U.S.C. § 103(a) be duly withdrawn.

## DEPENDENT CLAIMS 17-18, 36-37, and 46-47

Given that claims 17-18, 36-37, and 46-47 depend from one of independent claims 1, 19, 20, or 38, which are believed to be patentable as described above, Appellant respectfully submits that claims 17-18, 36-37, and 46-47 are allowable without any amendments to the independent claims.

Given that alleged AAPA and Bauer fail to teach or suggest a motivation to combine the teachings each reference or all of the elements recited in the independent claims 1, 19, 20, and 38 of the present application, Applicant respectfully submits that claims 1-48 are patentable over alleged AAPA and Bauer. Applicant requests that the rejection of claims 1-16, 19-35, 38-45, and 48 under 35 U.S.C. § 103(a) be withdrawn.

#### **SUMMARY**

In view of the foregoing, each of the claims on appeal has been improperly rejected because the Examiner has not properly established a *prima facie* case of indefiniteness for Claims 1-47 or a *prima facie* case of obviousness for Claims 1-16, 19-35, 38-45, and 48. Appellant is disappointed that so much time and expense has gone into establishing the alleged AAPA as an improper reference, when the context so clearly establishes this fact.

Appellant submits that the foregoing arguments establish the definiteness and non-obviousness of the claims of the present application. Therefore, Appellant respectfully requests reversal of the Examiner's rejection under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph and 35 U.S.C. § 103(a) and allowance of pending claims 1-48. Accordingly, Appellant submits that claims 1-48 are patentable.

Respectfully submitted,

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## 8. CLAIMS APPENDIX

The claims involved in the appeal, namely claims 1-38, are listed below.

- 1. A method for performing on a computer system one or more form independent application program operations on at least one Information Management System (IMS) resource comprising:
- (a) locating an actual Program Communication Block (PCB) associated with said at least one IMS resource exclusive of predetermined knowledge pertaining to an IMS construct form, and
- (b) utilizing said actual PCB to perform said one or more form independent application program operations on said at least one IMS resource.
  - 2. The method of claim 1 wherein said IMS resource is a database.
- 3. The method of claim 2 wherein said database is of a type selected from the group consisting of Data Entry Databases (DEDB), Hierarchic Direct Access Method (HDAM) and Hierarchic Indexed Direct Access Method (HIDAM).
- 4. The method of claim 3 wherein said application program operations include unloading said database.
- 5. The method of claim 3 wherein said application program operations include loading said database.

- 6. The method of claim 1 wherein said IMS construct form depends from the choice of programming language used to generate a Program Specification Block (PSB).
- 7. The method of claim 6 wherein said IMS construct form depends from the order of PCBs associated with said PSB.
- 8. The method of claim 1 wherein said application program operations are invoked from an application program executing in an IMS region selected from the group consisting of Batch Message Processing (BMP), Data Language One (DL/I), Database Management Batch (DBB), Message Processing Program (MPP) and Interactive Fast Path (IFP).
- 9. The method of claim 8 wherein locating an actual PCB further comprises locating an Input/Output (I/O) PCB.
- 10. The method of claim 8 wherein locating an actual PCB further comprises locating a database PCB.
- 11. The method of claim 6 wherein said PSB is associated with a language selected from the group consisting of COBOL, Assembly Language, PL/I, PASCAL and C.

- 12. The method of claim 7 wherein said IMS construct form additionally depends from the quantity of PCBs associated with said PSB.
- 13. The method of claim 9 wherein utilizing said actual PCB comprises utilizing said I/O PCB to perform checkpoint processing.
  - 14. The method of claim 1 wherein step (a) comprises the steps of:
  - (a1) locating a first candidate PCB,
  - (a2) determining if said first candidate PCB is said actual PCB, and
- (a3) if said first candidate PCB is not said actual PCB, utilizing said first candidate PCB as a pointer to locate said actual PCB.
- 15. The method of claim 14 wherein said determining step comprises verifying that a name field of said first candidate PCB consists of only printable characters.
  - 16. The method of claim 14 wherein said locating step comprises the steps of:
  - (a1.1) utilizing a register 13 to access a program save area,
- (a1.2) utilizing an High Save Area (HSA) pointer from said program save area to access a calling program's save area,
- (a1.3) utilizing a saved register 1 from said calling program's save area to access a parameter list, and

- (a1.4) utilizing a parameter list entry from said parameter list to access said first candidate PCB.
  - 17. The method of claim 16 wherein the steps of claim 14 further comprise:
- (a4) comparing a NAME field of said actual PCB with the name of said IMS resource to determine if said actual PCB is associated with said IMS resource,
- (a5) checking a high order bit of said parameter list entry if said actual PCB is not associated with said IMS resource, and
- (a6) obtaining a second candidate PCB by utilizing a next sequential parameter list entry from said parameter list and repeating steps (a2) through (a6) substituting said second candidate PCB for said first candidate PCB if said high order bit is not "1".
- 18. The method of claim 17 wherein step (a5) further comprises generating an error condition if said high order bit is "1".
- 19. A method for performing an application program operation on at least one Information Management System (IMS) database comprising:
- (a) ensuring the existence of IMS constructs representing said at least one IMS database without regard for construct form, and
- (b) executing a construct form independent application program for performing said application program operation on said IMS database.

- 20. A computer system for performing one or more form independent application program operations on at least one Information Management System (IMS) resource comprising:
  - (a) a computer,
- (b) computer program first instructions executing on said computer for locating an actual Program Communication Block (PCB) associated with said at least one IMS resource exclusive of predetermined knowledge pertaining to an IMS construct form, and
- (c) computer program second instructions executing on said computer for performing said one or more form independent application program operations on said at least one IMS resource utilizing said actual PCB.
  - 21. The system of claim 20 wherein said IMS resource is a database.
- 22. The system of claim 21 wherein said database is of a Hierarchic Direct Access Method (HDAM) type.
- 23. The system of claim 21 wherein said application program operations include unloading said database.
- 24. The system of claim 21 wherein said application program operations include loading said database.

- 25. The system of claim 20 wherein said IMS construct form depends from the choice of programming language used to generate a Program Specification Block (PSB).
- 26. The system of claim 25 wherein said IMS construct form depends from the order of PCBs associated with said PSB.
- 27. The system of claim 20 wherein said application program operations are invoked from an application program executing in an IMS Batch Message Processing (BMP) region.
- 28. The system of claim 27 wherein said computer program first instructions locate an Input/Output (I/O) PCB.
- 29. The system of claim 27 wherein said computer program first instructions locate a database PCB.
  - 30. The system of claim 25 wherein said PSB is associated with COBOL.
- 31. The system of claim 26 wherein said IMS construct form additionally depends from the quantity of PCBs associated with said PSB.
- 32. The system of claim 28 wherein said computer program second instructions use said I/O PCB to perform message queue processing.

- 33. The system of claim 20 wherein said computer program first instructions perform a method for locating said actual PCB, said method comprising:
  - (a1) locating a first candidate PCB,
  - (a2) determining if said first candidate PCB is said actual PCB, and
- (a3) locating said actual PCB utilizing said first candidate PCB if said first candidate PCB is not said actual PCB.
- 34. The system of claim 33 wherein (a2) comprises verifying that a name field of said first candidate PCB consists of only printable characters.
  - 35. The system of claim 33 wherein (a1) comprises:
  - (a1.1) locating a program save area,
  - (a1.2) locating a calling program's save area utilizing said program save area,
  - (a1.3) locating a parameter list utilizing said calling program's save area, and
  - (a1.4) locating said first candidate PCB utilizing said parameter list.
  - 36. The system of claim 33 further comprising:
  - (a4) determining if said actual PCB is associated with said IMS resource,
- (a5) checking for the existence of a second candidate PCB if said actual PCB is not associated with said IMS resource, and

- (a6) repeating (a2) through (a6) substituting said second candidate PCB for said first candidate PCB if said second candidate PCB exists.
- 37. The system of claim 36 wherein (a5) further comprises generating an error condition if said second candidate PCB does not exist.
- 38. An article of manufacture for use in a computer system tangibly embodying a program of instructions executable by the computer system to perform method steps for performing one or more form independent application program operations on at least one Information Management System (IMS) resource, the method comprising the following steps:
- (a) locating an actual Program Communication Block (PCB) associated with the at least one IMS resource exclusive of predetermined knowledge pertaining to an IMS construct form, and
- (b) utilizing the actual PCB to perform the one or more form independent application program operations on the at least one IMS resource.
  - 39. The article of manufacture of claim 38 wherein the IMS resource is a database.
- 40. The article of manufacture of claim 38 wherein the IMS construct form depends from a characteristic selected from the group consisting of Program Specification Block (PSB) programming language, PCB order, and PCB quantity.

- 41. The article of manufacture of claim 38 wherein step (a) comprises locating an Input/Output (I/O) PCB.
- 42. The article of manufacture of claim 41 wherein step (b) comprises utilizing the I/O PCB to perform checkpoint processing.
  - 43. The article of manufacture of claim 38 wherein step (a) comprises the steps of:
  - (a1) accessing a first candidate PCB,
  - (a2) evaluating whether the first candidate PCB is the actual PCB, and
- (a3) utilizing information from the first candidate PCB to access the actual PCB if the first candidate PCB is not the actual PCB.
- 44. The article of manufacture of claim 43 wherein the evaluation step (a2) comprises determining if a name field of the first candidate PCB consists of only printable characters.
- 45. The article of manufacture of claim 43 wherein the accessing step (a1) comprises the steps of:
  - (a1.1) utilizing a memory address from a register 13 to access a program save area,
- (a1.2) utilizing a memory address from the program save area to access a calling program's save area,
- (a1.3) utilizing a memory address from the calling program's save area to access a parameter list, and

- (a1.4) utilizing a memory address from the parameter list to access the first candidate PCB.
  - 46. The article of manufacture of claim 43 further comprising:
  - (a4) determining if the actual PCB is associated with the IMS resource,
- (a5) checking for the existence of a second candidate PCB if the actual PCB is not associated with the IMS resource, and
- (a6) repeating steps (a2) through (a6) with substitution of the second candidate PCB for the first candidate PCB if the second candidate PCB exists.
- 47. The article of manufacture of claim 46 wherein step (a5) further comprises generating an error condition if the second candidate PCB does not exist.
  - 48. The article of manufacture of claim 45 further comprising:
- (a1.5) determining that the language environment is PASCAL if a parameter list entry in the first entry location of the parameter list is zero.

#### 9. EVIDENCE APPENDIX

Exhibit A is a website page submitted in support of the Office Action Mailed September 7, 2004. The Exhibit A includes a definition of the term PCB used in the claims. The Online File Wrapper for this application, serial no. 09/778,236, indicates that this evidence was entered into the record on September 7, 2004. A copy of this Exhibit A is included with this brief for convenience.

# 10. RELATED PROCEEDINGS APPENDIX

There is no material to be included in the Related Proceedings Appendix.